

PRODUCT INFORMATION

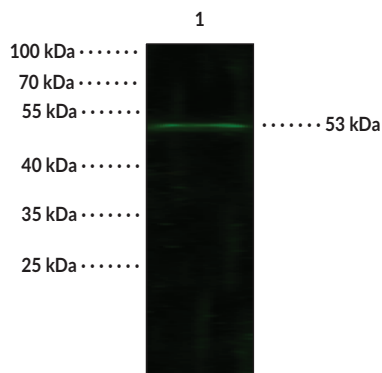
p53 (cynomolgus monkey) Monoclonal Antibody (Clone 06)

Item No. 37069

Overview and Properties

Contents:	This vial contains 50, 100, or 200 µl, or 1 ml of protein A-affinity purified monoclonal antibody.
Synonyms:	Antigen NY-CO-13, Cellular Tumor Antigen p53, Phosphoprotein p53, Transformation-related Protein 53, Tumor Protein p53, Tumor Suppressor p53
Immunogen:	Recombinant cynomolgus monkey p53
Cross Reactivity:	(+) p53
Species Reactivity:	(+) Cynomolgus monkey
Form:	Liquid
Storage:	-80°C (as supplied)
Stability:	≥1 year
Storage Buffer:	0.2 µm filtered solution in PBS
Clone:	06
Host:	Mouse
Isotype:	IgG1
Applications:	ELISA and Western blot (WB); the recommended starting concentration is 1:5,000-1:10,000 for ELISA and 1:500-1:1,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: 293T Whole cell lysate (30 µg per lane)

WB of p53 (cynomolgus monkey) Monoclonal Antibody (Clone 06) at 1:5,000 dilution.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/07/2024

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

p53 is a transcription factor and tumor suppressor encoded by *TP53* in humans with roles in cell cycle arrest, apoptosis, senescence, differentiation, and DNA repair.^{1,2} It is composed of two N-terminal intrinsically disordered transactivation domains (TADs), a proline-rich domain (PRD), a DNA-binding domain (DBD), a tetramerization domain (TD), and an intrinsically disordered C-terminal domain.¹ p53 is ubiquitously expressed, with protein levels increasing under conditions of extra- or intracellular stress, such as DNA damage, oncogene activation, oxidative stress, or hypoxia.³ It is activated and translocated to the nucleus in response to cellular stress via post-translational modifications, such as phosphorylation, methylation, and acetylation, where it binds p53 consensus DNA-binding elements and regulates transcription of its target genes in a cell-, tissue-, and stress signal type-specific manner.^{1,3} Loss-of-function and/or gain-of-function mutations in *TP53* occur in approximately 50% of human cancers.² Cayman's p53 (cynomolgus monkey) Monoclonal Antibody (Clone 06) can be used for ELISA and Western blot (WB) applications.

References

1. Liu, Y., Tavana, O., and Gu, W. p53 Modifications: Exquisite decorations of the powerful guardian. *J. Mol. Cell Biol.* **11**(7), 564-577 (2019).
2. Stein, Y., Rotter, V., and Aloni-Grinstein, R. Gain-of-function mutant p53: All the roads lead to tumorigenesis. *Int. J. Mol. Sci.* **20**(24), 6197 (2019).
3. Yue, X., Zhao, Y., Xu, Y., et al. Mutant p53 in cancer: Accumulation, gain-of-function and therapy. *J. Mol. Biol.* **429**(11), 1595-1606 (2017).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM